Two new Mordellidae (Coleoptera) from Southern Europe, and a key to the Mordellistena micans group

by

R. BATTEN

ABSTRACT. — Two species of Mordellidae from southern Europe are described: Variimorda (Sulcatimorda) krikkeni n.sp. and Mordellistena wiebesi n.sp. A key to the West Palaearctic species of the Mordellistena micans group is given, with illustrations of each species. A lectotype for Mordellistena stenidea is selected.

INTRODUCTION

During a foray in Macedonia I caught some Mordellidae which represent two new species, of *Variimorda* and *Mordellistena* respectively, which are described in this paper. I have inserted the new *Mordellistena* in a key to the species of the *micans* group.

The following abbreviations are used:

AC — author's collection.

MA — Zoölogisch Museum (Instituut voor Taxonomische Zoölogie) van de Universiteit van Amsterdam.

ML - Rijksmuseum van Natuurlijke Historie, Leiden.

MP — Muséum National d'Histoire Naturelle, Paris.

PT — collection Méquignon, property of Mr. P. Teocchi, Sérignan near Orange (France).

SMD — Staatliches Museum für Tierkunde, Dresden.

Variimorda (Sulcatimorda) krikkeni n.sp. figs. 3, 6, 7.

This Mordellid has the usual features of the genus *Variimorda*, and belongs to the subgenus *Sulcatimorda* because the pygidium is clearly depressed at both sides above the lateral grooves. This species however lacks the patches of white or yellow pubescence characteristic of the other species in the genus.

Description. — Dimensions: ♂: length of the body 4.5-5.5 mm (without pygidium); length of elytra 3.0-3.6 mm, width 1.6-1.9 mm; pygidium 1.5-1.8 mm; fifth sternite 1.0-1.1 mm. ♀: length of body 4.6-6.6 mm; length of elytra 3.1-4.2 mm; width 1.65-2.3 mm; pygidium 1.5-2 mm; fifth sternite 0.8-1.1 mm.

Head transverse, width/length ratio \Im ca. 1.2-1.5, \lozenge ca. 1.1-1.3, finely punctured, hind margin convex, eye minutely granulated and hairy. Galea long and narrow, without appendages, and ending in a very fine point. Antenna segments of the \Im 1-4 and partly 5 reddish brown, \lozenge darker. Maxillary palp of the \Im reddish brown, apex of segment 4 black, \lozenge brown black, segment 4 black.

Pronotum slightly broader than elytra at shoulders, width/length ratio \Im ca. 1.3, \Im 1.2-1.4, punctures slightly larger than on head, anterior angles convex, basal angles obtuse and rounded at edge; scutellum approximately semicircular.

Elytra black, densely punctate, punctation stronger than on pronotum, pubescence black, length/width ratio 1.8-1.9 (1 & 1.94), sides from shoulders strongly attenuated posteriorly (fig. 3).

Integument of underside black, pubescence black.

Pygidium clearly depressed at both sides above the lateral grooves, length 1.35-1.8 times that of fifth sternite, about 3 times as long as broad.

Legs black, & anterior tibiae reddish brown to brownish black. Spurs of hind leg black with dark reddish point.

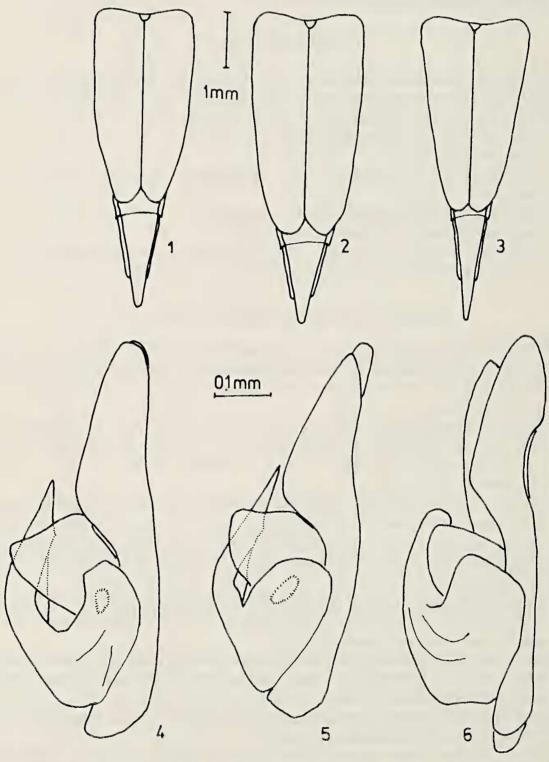
Parameres: ventral branch of right paramere with rounded and reflexed apex (figs. 6, 7).

Material examined. — Greece (Mak.) 15 km W. of Édhessa, 6.VII.1976, ca. 100 m, leg.

R. Batten (1 \circlearrowleft holotype, 1 \circlearrowleft allotype ML, 3 \circlearrowleft and 3 \circlearrowleft paratypes AC), roadside on flowering *Daucus* and other Umbelliferae, slopes with *Quercus coccifera*, shrubs, *Euphorbia*.

Discussion. — The galeae of *Variimorda fagniezi*, theryi and krikkeni are similar; *V. fagniezi* has its elytra two times as long as their combined width at base; theryi is similar in this character (according to the type-specimens I studied), though Méquignon (1946: 60) writes they are 1.5 times as long as broad. The new species, however, has strongly attenuated elytra 1.8-1.9 as long as broad; the pygidium is a bit longer in proportion to the fifth sternite, while the parameres differ as well (figs. 6, 7).

I dedicate this new species to Mr. J. Krikken of the ML, for his kind advice.



Figs. 1—6. - 1, 4, Variimorda fagniezi (Spain, Barcelona, Avinyo); 2, 5, V. theryi (cotype Maroc la Mimouna); 3, 6, V. krikkeni (holotype). - 1—3 elytra and pygidium; 4—6 combined parameres, dextrolateral view.

Variimorda theryi (Méquignon) figs. 2, 5.

theryi Méquignon, 1946: 73-75, (Mordella subgenus Sulcatimorda); Ermisch 1969: 166 (in Variimorda).

Discussion. — The types of *V. theryi* differ from fagniezi in the elytra, which in theryi are a bit more parallel posteriorly (figs. 1, 2), and in the colour of the middle tibia, being reddish in the male. Méquignon (1946: 75) writes: "Extérieurement les différences sont en effet minimes". The difference in the parameres is that in theryi the ventral branch of the right paramere is abruptly bent in the middle, the distal part obliquely directed to the inner side (fig. 5). After having compared the parameres of theryi with those of my specimens agreeing with fagniezi in the two external characters just mentioned, I can only conclude that the difference is small (figs. 4, 8).

Material examined. — Morocco: labelled as follows: "Rabat", "♂ Théryi Méq.", red "type" (1 ♂ holotype); "fasciata F.", "Marocco, Casablanca, Reitter", "M. Théryi var. maroccana Méquign.", red "type" (1 ♂); "1. Mimouna, Maroc. coll. Théry", "M. Théryi var. nigrescens", red "type" (1 ♂); "la Mimouna Maroc, coll. Théry", "♂ Théryi n.sp.", red "cotype" (1 ♂ with mounted parameres fig. 5); "Mamora", "Maroc, coll. Théry", "♀ Théryi Méquign." and "♂ Théryi n.sp.", red "cotype" (1 ♂ and 1 ♀) PT.

Variimorda fagniezi (Méquignon) figs. 1, 4, 8.

fagniezi Méquignon, 1946: 73, 74 (Mordella subgenus Sulcatimorda), Ermisch 1969: 166 (in Variimorda).

Material examined. — Many specimens from Spain, AC.

Mordellistena micans group

The species of the *micans* group belong to *Mordellistena* s.str., in fact the first section of Ermisch, having the first four segments of the antenna narrower and shorter than the fifth segment. The group is characterised by the following features: colour of pubescence light; at least three oblique ridges (apart from apical one) on the hind tibia parallel to the distal end; only the first and second tarsal segments with ridges; punctures on elytra finely asperate; pygidium long and slender (broader in *stenidea*); terminal segment of maxillary palp slender securiform, narrower and smaller than those of the *pumila* group.

Discussion. — It should be emphasized that smaller specimens frequently lack the third ridge on the hind tibia, and are then identified as belonging to the gemellata group. In that case only the genitalia of the males are decisive, whereas in the females there is a constant character in the eighth urosternite. The females of the micans and gemellata groups have in the middle of the posterior membrane of the eighth urosternite a chitinised axis being,

a. in the micans group:

slender with straight or concave sides (fig. 26) in minima, stenidea, grisea, micantoides and wiebesi n.sp.;

approximately circular with protruding apex (fig. 27) in perroudi, hirtipes and pseudohirtipes;

b. in the gemellata group:

long ovally with more or less convex sides (fig. 28) in fuscogemellata Ermisch, carinthiaca Ermisch and dvoraki Ermisch;

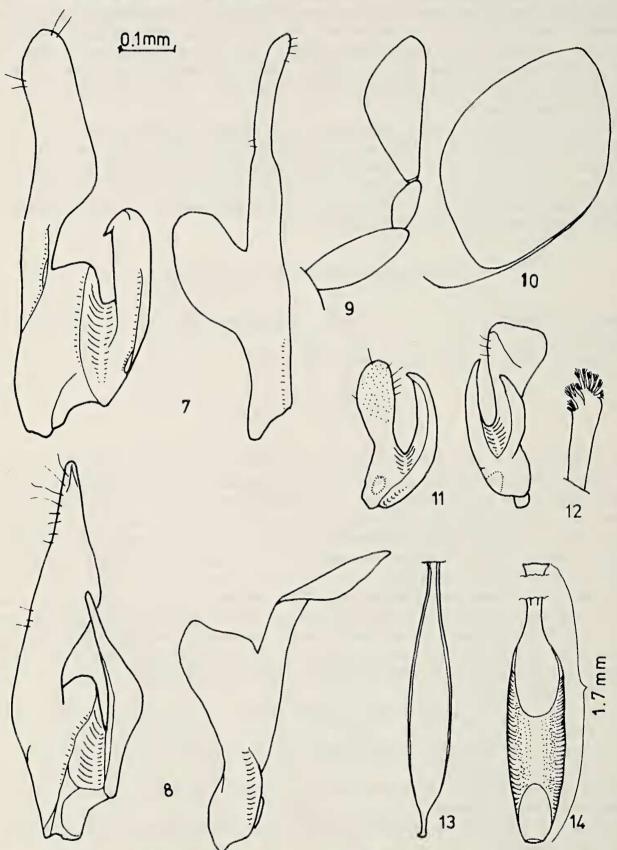
broadened to approximately circular at apex (fig. 29) in gemellata Schilsky, pyrenea Ermisch and algeriensis Ermisch.

In the reverse case this character can be used when there is a third ridge or the beginning thereof in the gemellata group.

Note. — M. aegea does not belong to the micans group, but to the second section of Ermisch, because the fourth segment of the antenna is as long as the fifth.

Mordellistena wiebesi n.sp. figs. 9-14.

Description. — Dimensions: ♂ length of body 3.2—5.0 mm without pygidium; length of elytra 2.3—3.5 mm, width 0.9—1.3 mm; pygidium 1.35—1.8 mm; fifth sternite 0.5—0.8 mm. ♀ length of body 3.4—4.2 mm; length of elytra 2.4—3.1 mm, width 0.95—1.25 mm; pygidium 1.1—1.5 mm; fifth sternite 0.5—0.6 mm.



Figs. 7—14. - 7, Variimorda krikkeni (holotype); 8, V. fagniezi (Spain, Barcelona, Avinyo); 9—14, Mordellistena wiebesi (holotype except 12). - 7.8, 11 parameres inner side, right paramere on left hand, left paramere on right hand; 9, right maxillary palp; 10, eye dextrolateral; 12, right galea; 13, apex of penis; 14, phallobase.

General shape moderately elongate, sides anteriorly parallel, posteriorly slightly convex. Integument black; pubescence sericeously yellow.

Head almost as long (from point of mandibles to hind margin) as broad, approximately circular, fine and densely punctate, with blue and yellow shagreening, hind margin approximately semicircular. Galea cf. fig. 12. Eyes finely granulated, hairy, temporal margin narrow (fig. 10). Terminal segment of maxillary palp slender, approximately securiform, in 3 length/width ratio 2.5, inner side slightly rounded, largest at 0.6 of length from base (fig. 9), in 3 smaller, length/width ratio 2.4, largest at 0.7 of length from base. Antenna in 3 segment 11 1.3 times segment 10, segments 5—10 nearly parallel shaped, in 3 2 times as long as broad, in 3 1.7 times.

Pronotum with width/length ratio 1.1, broadest just in front of base; anterior lobe protruding, basal lobe prominent; lateral borders in dorsal view moderately convex, in lateral view concave; basal angles rectangular with a pointed edge; punctures shallowly impressed. Scutellum triangular, sides slightly convex.

Elytra with length/width ratio 32.5-2.7, 22.5-2.6; sides moderatly elongate slightly convex; elytral apices separately rounded, punctures slightly asperate, pubescence densely covering integument.

Underside with bright pubescence except on last three segments, where it is infuscated.

Pygidium with length in male 2.2—2.9 times that of fifth sternite, in female 2.2—2.5 times; pygidium half as long as elytra; pygidium in doral view slender, evenly attenuated, in lateral view slightly convex.

Fore tibia in lateral view slightly convex, not dilated in male, nor with fringe of hairs along inner border; hind tibia with 3—5 ridges apart from apical one, first tarsal segment with 4—6 ridges, second one with 2—3 ridges; outer spur twice as long as inner one.

Parameres, apex of penis, phallobase, cf. figs. 11, 13, 14.

Material examined. — Greece (Mak.): 10 km S. of Kerkíni, 100 m, 8.VII.1976, leg. R. Batten, 1 ♂ holotype, 1 ♀ allotype (ML), 5 ♂ and 4 ♀ paratypes (AC), on flowers of Umbelliferae, slopes to Lake Kerkinítis, deciduous trees, shrubs, *Euphorbia, Eringium*. Other paratypes as follows: Spain (Barcelona): Montseny, 522 m, 12.VII.1975, leg. R. Batten, (1 ♂ AC) on *Daucus* in deciduous forest; Spain: env. of Playa d'en Pere Fet Cadaques, 5.VIII.1950. leg- L.B. Holthuis (2 ♂ ML) on succulent Umbellifer; Yugoslavia: Dubrovnik 1974 leg. Hladil (2 ♂, one coll. Berger, one AC, kindly presented to me by Mr. C. J. M. Berger); Yugoslavia: Marja (nr. Split), 9.VI.1962, leg. M. H. de Boer (1 ♂ MA); Italy (Bresc.) Idro, 1.VII.1973, leg. P. Kanaar (1 ♂ AC, kindly presented to me by Mr. P. Kanaar).

Discussion. — The male of *M. wiebesi* n. sp. has no fringe of hairs along the inner border of the fore tibia, in which it agrees with *M. grisea, micantoides* and *stenidea*. The segments 5—10 of the antenna of the male are in *M. wiebesi* twice as long as broad, whereas they are alomst square in *stenidea*, and 1.3 times as long as broad in *grisea* and *micantoides*. Other differences are in the terminal segment of the maxillary palp, the pygidium and the pronotum as described.

I dedicate this new species to Prof. Dr. J. T. Wiebes of the University of Leiden, who recommended to me the study of the Mordellidae.

Account of the *micans* group, species and material examined. *Mordellistena hirtipes* Schilsky, fig. 15.

hirtipes Schilsky 1895: 46.

Material: Peloponnesis, Kyllini, VII, leg. Muche (1 ♂ and 1 ♀ SMD); Greece, (Mak.) Drama, 7.VII.1976, leg. R. Batten (1 ♂ AC); Greece (Mak.) Kerkíni, 8.VII.1976, leg. R. Batten (11 ♂ and 11 ♀ AC).

Mordellistena pseudohirtipes Ermisch, fig. 16.

pseudohirtipes Ermisch 1965: 265, 268, 269.

Material: France (Var) Vidauban, 6.VII.1973, leg. R. Batten (25 ♂ and 25 ♀ AC).

Mordellistena micans (Germar) fig. 30.

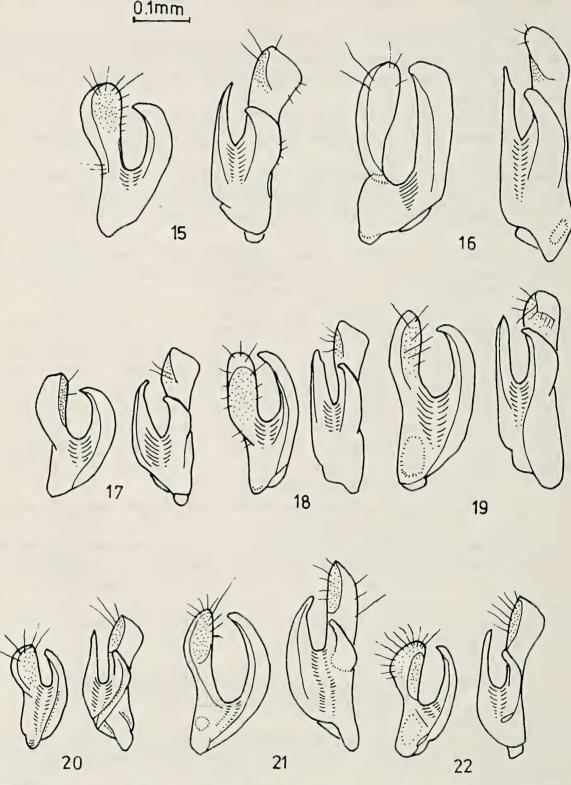
micans Germar 1817: 212, Mordella; Ermisch 1954: 175—177, Mordellistena.

Material: Turkey, Kilios-Kôl., 11.VII.1954, leg. F. Schubert (1 ♂ and 1 ♀ det. Ermisch, parameres mounted SMD).

Mordellistena minima (Costa) figs. 20, 26.

minima Costa 1854: 18, Mordella; Mulsant 1856: 383, Mordellistena.

Material: Cyprus, Kyrenia, 9.VI.1939, leg. Håkon Lindberg (1 \circlearrowleft det. Ermisch SMD); France (Var) la Môle, 6.VII.1973, leg. R. Batten (3 \circlearrowleft AC), France (Aude) Quillan, 10.VII.1973, leg. R. Batten (6 \circlearrowleft and 10 \circlearrowleft AC).



Figs. 15—22. - Parameres of: 15, Mordellistena hirtipes (Greece, Mak., Drama); 16, M. pseudo-hirtipes (France, Var, Vidauban); 17, M. purpurascens (Italy, Sicily, Pachino); 18, M. grisea (Greece, Mak., Édhessa); 19, M. micantoides (France, Gironde, Soulac sur Mer); 20, M. minima (France, Var, La Môle); 21, M. stenidea (France, Aude, Quillan); 22, M. perroudi (Spain, Barcelona, Avinyo).

Mordellistena grisea Mulsant figs. 18, 24.

grisea Mulsant 1856: 376; Ermisch 1954: 175-177.

Material: France merid. leg. Puel (1 ♂ and 1 ♀ det. Ermisch 1952 SMD); Greece (Mak.) Édhessa, 6.VII.1976, leg. R. Batten (17 ♂ and 8 ♀ AC).

Mordellistena perroudi Mulsant figs. 22, 23.

perroudi Mulsant 1856: 382, 383.

Material: Turkey, Belgrader Wald, 1—7.VII.1954, leg. Schubert (1 ♂ and 1 ♀ SMD; Spain (Barcelona) Avinyo, 9.VII.1974, leg. R. Batten (1 ♂ and 1 ♀ AC).

Mordellistena stenidea Mulsant fig. 21.

stenidea Mulsant 1856: 381, 382.

Material: The type of Mulsant, labelled: "Museum Paris, 1843, coll. E. Mulsant", red "Type", handwritten "Mordellistena stenidea". I extracted the parameres and hereby select this specimen as lectotype of *M. stenidea*; France (Aude) Quillan, 10.VII.1973, leg. R. Batten (3 of AC).

Mordellistena purpurascens (Costa) fig. 17.

purpurascens Costa 1854: 17, Mordella; Ermisch 1954: 175-177, Mordellistena.

Material: Italy, Capo Circea, 27.VII.1939, leg. C.N.R. Com. Naz. Biol., parameres mounted (1 3 SMD); Italy (Sicily) Pachino, IV.1934, leg. Burlini (AC).

Mordellistena micantoides Ermisch, figs. 19, 25.

micantoides Ermisch 1954: 175-180.

Material: D.D.R., Kyffhäuser Gebirge Ochsenburg, 19.VIII.1959, leg. Mohr, genitalia were mounted (right paramere missing) (1 σ det. Ermisch 1959 SMD); Frankenhausen, 20.VIII.1963, leg. and det. Ermisch 1963 (1 \circ SMD); France (Gironde) Soulac sur Mer, 5.VII.1974, leg. R. Batten (3 σ and 4 \circ AC).

Mordellistena balianii Franciscolo.

balianii Franciscolo 1942: 77-79.

Mordellistena ermischi Compte

ermischi Compte 1966: 252, 254.

Mordellistena wiebesi n.sp. figs. 9—14.

Described in this paper.

Key to the West Palaearctic micans group species.

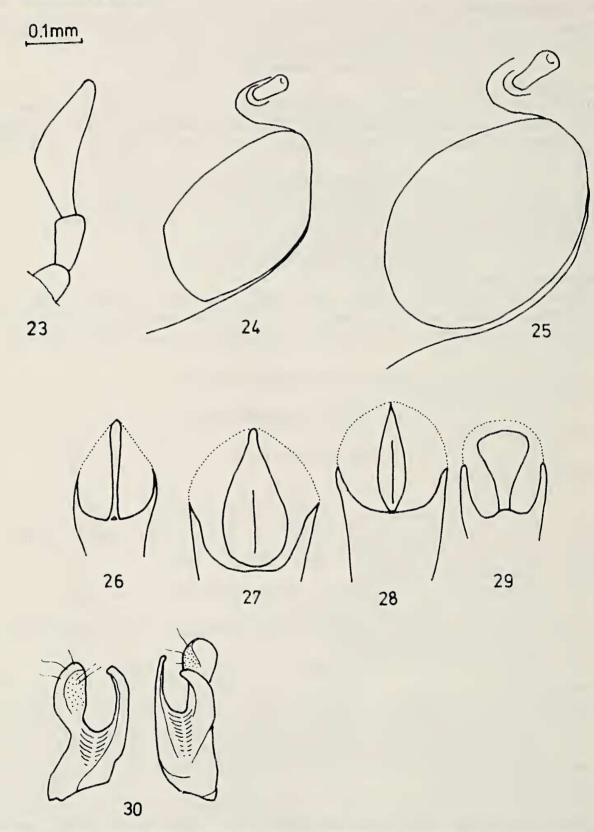
Note. — Ridges on hindlegs noted as follows: 3/4-3-2 means 3 or 4 ridges on tibia apart from apical one, 3 on first tarsal segment, 2 on second tarsal segment.

Length is measured without pygidium.

- z. Segments 5—10 of antenna in male each with length/width ratio 1.25. In male terminal segment of maxillary palp broader triangular than in *hirtipes*. Head circular, almost as long as broad. Elytra with length/width ratio in male 2.5 in female 2.3. Pygidium in male 0.7 times as long as elytra and two times as long as fifth sternite. Ridges 3/4-3/5-2/3. Parameres fig. 16. Length 3.3-4.5 mm. S. Europe pseudohirtipes Ermisch
- 4y. Maxillary palp in male reddish brown, in female brown. Antenna with basal segments reddish brown, other segments black, segments 5—10 each with length/width ratio 1.2. Fore and middle legs reddish brown, tarsus darkened distally. Pronotum broadest behind

middle, in lateral view slightly concave. Elytra with length/width ratio 2.1-2.5, finely punctate; pubescence yellowish with red-violet shine. Pygidium 2.5 times as long as fifth sternite. Ridges 3/4-3/4-2/3. Parameres fig. 30. Length 3.65-4.25. Tirol, Hungary, Balkan micans (Germar)

z. Maxillary palp black 5



Figs. 23—30. - 23, Mordellistena perroudi (& Spain, Barcelona, Avinyo); 24. M. grisea (& Greece, Mak., Édhessa); 25, M. micantoides (& France, Gironde, Soulac sur Mer); 26, M. minima (France, Aude, Quillan); 27, M. perroudi (Spain, Barcelona, Avinyo); 28. M. fuscogemellata (France, Pyr. Or., Canet Plage); 29, M. gemellata (Spain, Salamanca, Bejar); 30, M. micans (Turkey, Kilios-Köl.). - 23, right maxillary palp; 24, 25, eye dextrolateral; 26—29 posterior part of female eighth urosternite from dried specimen; 30, parameres.

	ENIOMOLOGISCHE BERICHIEN, DEEL 37, 1.XI.1977
z.	Pubescence of underside strikingly light and dense. Pronotum in lateral view concave, basal angles rectangular with a pointed edge. Segments 5—10 of antenna each with length/width ratio ca. 1.1—1.25. Elytra with length/width ratio in male 2.6, in female 2.4; pubescence shining red-violet. Length pygidium/fifth sternite ratio 1.6. Ridges 3-4-2. Parameres fig. 17. Length 4.5—5.0 mm. S. Italy, Sicily
	France, Spain, Italy, Greece minima (Costa)
y.	Segments 5—10 of antenna each with length/width ratio 1.25, segment 11 long oval. Galea short, inner side with appendages. Pronotum in lateral view slightly concave, basal angles rectangular with a pointed edge. Elytra almost parallel, length/width ratio ca.
	2.5—2.6; pubescence grey, shining reddish golden. Length pygidium/fifth sternite ratio 2;
	sometimes 2.5, then pygidium very slender at apex. Ridges 4/5-4-2. Parameres fig. 22. Length 2.8—3.5 mm. S. France, Spain, Balkan perroudi Mulsant
z.	Segments 5, 7—10 of antenna each with length/width ratio 1.35, but segment 6 shorter.
	Pronotum in lateral view concave, basal angles rectangular. Elytra with length/width
	ratio 2.2, sides in female parallel; pubescence sericeous greyish yellow. Terminal segment
	of maxillary palp in male triangular, in female spindle-like. Ridges 4-4-3. Length 3.5—4
7.	mm. Spain (Ibiza) ermischi Compte Elytra with length/width ratio more than 3. Head with width/length ratio ca. 2. Segments
/ y .	5—10 of antenna each with length/width ratio a bit smaller than 2, these segments are
ı	triangular with a blunt inner angle. General shape elongate, posteriorly slightly dilated; pubescence sericeous, brown. Pronotum with basal angles rectangular. Length pygidium/ fifth sternite ratio 2.5. Ridges 4-4-3. Length 5.0—5.6 mm. Sicily balianii Franciscolo
	Elytra with length/width ratio shorter
8y.	Segments 5—10 of antenna each with length/width ratio in male 2, in female 1.7; nearly parallel shaped. Galea cf. fig. 12. Elytra with length/width ratio 2.5—2.7. Length pygidium/elytra ratio 0.5; length pygidium/fifth sternite ratio 2.2—2.9. Ridges 3/5-4/6-2/3. Parameres
	fig. 11. See figs. 9—14. Length 3.2—5.0 mm. Spain, Italy, Dalmatia, Greece wiebesi n.sp.
	Segments 5—10 of antenna shorter
Jy.	view almost straight, basal angles obtuse with a rounded edge. Elytra with length/width
	ratio 2.5-2.7, sides almost parallel; pubescence light grey to yellow-grey. Pygidium con-
	ical, fifth sternite broad, length pygidium/fifth sternite ratio 2. Ridges 3/4-3/4-2- Phallobase
	short. Parameres fig. 21. Length 2.5—3.5 mm. S. Europe stenidea Mulsant
	Segments 5—10 of antenna each with length/width ratio ca. 1.3
Юу.	Elytra with length/width ratio 2.5—3, from shoulders to apex evenly attenuated; pubescence grey with a light brown hue. Eyes elongately oval (fig. 24). Galea long and
	narrow, without appendages, apex more or less pointed. Pronotum with basal angles
	obtuse with a pointed edge. Ridges 3/5-3/4-2/3. Parameres fig. 18; distal part of penis
	slightly oval. Length 3.3—4.5 mm. S. Europe grisea Mulsant
Z.	Elytra with length/width ratio 2.3—2.5, sides almost parallel in anterior half, thence
	slightly attenuated; pubescence densely yellow-grey. Eyes broadly oval (fig. 25). Galea short, rounded apex with appendages. Proporting in lateral view concave, basal angles
	short, rounded apex with appendages. Pronotum in lateral view concave, basal angles obtuse with a rounded edge. Ridges 3/4-3/4-2. Parameres fig. 19; distal part of penis
1	broadened cometimes to elongately avail Length 3.1. 5.5 mm. Middle Europe, Hungary

broadened, sometimes to elongately oval. Length 3.1—5.5 mm. Middle Europe, Hungary, Balkan, Russia, France micantoides Ermisch

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Sprencklaan 3, 4333 HC Middelburg, the Netherlands.

Ist EUROPEAN CONGRESS OF ENTOMOLOGY

Following the initiative of representatives of a number of European Entomological Societies that met in Giessen, Germany in March 1976, the Royal Entomological Society will sponsor the first European Congress of Entomology, which will be held at Reading University in Britain from 19th-22nd September 1978.

Entomologists, whether amateur or professional, are cordially invited to the Congress. Contributions concerning recent research into problems related to European entomology will be welcome, however, papers on entomological research in other areas will also be considered. It is hoped that young research workers will contribute a large part of the programme. All interested entomologists are asked to send their name and address to the above address before 31st December 1977, and they will then be sent further details of the Congress in due course.

Entomologists wishing to offer a contribution should send the title and 150 word abstract to the above address by 1st December 1977 at the latest. Contributions in English, French and German will be accepted.

It is thought unlikely that the programme will be able to accommodate all of the contributions offered, but the Planning Committee will select papers from those received by the date stated and will produce a stimulating and structured programme. Contributions will not be published, other than as preprints of extended abstracts issued to participants at registration.

It is anticipated that attendance at the Congress will cost about £ 50 for those booking full accommodation, and participating in all events and visits. There will be a reduction for family members and bona fide students. A sightseeing programme will be arranged for accompanying family members if there is sufficient interest.

Department of Zoology, The University, Early Gate, Reading RG 62 AT, Britain.